NATIONAL FOREST-RESIDENTIAL INTERMIX

Abstract: Intermix is one of the eight major revision topics for the *Forest Plan* revision. Intermix is a term used to describe areas where private land is adjacent to or intermingled with NFS lands. The presence of these private lands strongly influences the use and management of the surrounding NFS lands, often to the extent that it is difficult to implement management area prescriptions effectively or efficiently. Private landowners and Forest visitors do not always agree on how these lands should be managed, or on the uses that should occur. Currently, all intermix lands are allocated to a variety of management area prescriptions, each with a different emphasis.

The Forest received many comments and concerns about the management of the intermix regarding wildfire, safety, trespass, and aesthetics. The *Forest Plan* revision adopted a management area prescription called Intermix (7.1) to concentrate on addressing these issues. Lands allocated to management area 7.1 are managed to protect natural resources, provide compatible multiple uses, reduce the potential for catastrophic wildfire, and maintain the relationships between the landowners and other governments with jurisdiction.

Alternative H allocates the most acres to the intermix management area prescription. Next is Alternative B which concentrates on the areas of most intense conflict and development. Alternatives C and E have the third largest number of acres, followed by Alternative I. Alternative A does not allocate any acres to the intermix prescription and therefore does not specifically acknowledge or address the public concerns about the intermix, or put any special emphasis on intermix issues such as fuel reduction and landownership consolidation.

INTRODUCTION

Intermix is a term used to describe areas where private land is adjacent to or intermingled with NFS lands. Intermix on the Forest ranges from small communities, towns and subdivisions, to scattered rural residences. They include private lands adjacent to or within the National Forest boundary that have been or are likely to be developed for recreation, rural, residential, urban, or commercial uses. Generally, these lands are small parcels (5 to 100 acres). Intermix is an area where the presence of residences and other improvements strongly influences the use and management of the surrounding and adjacent NFS lands, often to the extent that management area prescriptions cannot be implemented effectively or efficiently. The intermingling of landownership from public to private can break up areas of key wildlife winter range, preclude access to recreation opportunities, change the character of recreation experiences, and create areas so splintered by private ownership due to patented mining claims that they often no longer possess National Forest character.

The management of intermix areas is often controversial. Private landowners and Forest visitors do not always agree on how these areas should be managed and what uses should occur. Traditional forest uses and management practices are often a concern of residents, especially such practices as mechanical treatment, timber harvest, prescribed fire or other practices that alter the landscape's appearance. Residents often have moved to such areas for solitude. Uses such as target shooting, off-highway vehicle use, and firewood cutting create noise and dust and alter the environment residents of the intermix seek.

LEGAL AND ADMINISTRATIVE FRAMEWORK

The intermix does not have any specific laws or policies governing its management but is affected by the pertinent laws and policies which direct the management of all natural resources. There are cooperative agreements and memorandums of understanding (see Fire Section) that foster joint efforts across jurisdictions to address such issues as fire management, forest health and law enforcement.

AFFECTED ENVIRONMENT

Intermix lands on the Arapaho and Roosevelt National Forests are currently allocated to a number of different management areas, each with a different management emphasis. Intermix areas exist across the Forests on all districts; however the areas most intensely affected by the intermix presence are located on the Boulder and Clear Creek Ranger Districts. These intermix areas were created by patented mining claims along the mineral belt. Patented mining claims are lands transferred out of federal ownership under the mining laws. Today these areas resemble subdivisions with fractured remnants of NFS lands interspersed with privately owned and developed lands. These fractured remnants of NFS lands are called mineral survey fractions.

The 1984 Forest Plan applied a range of prescriptions to these lands ranging from an emphasis on dispersed motorized and nonmotorized recreation to an emphasis on wood fiber production for products other than sawtimber. There are also areas with an emphasis on big game wildlife winter range since a large portion of the lands in the intermix are at lower elevations. Many of these management practices are not desired by adjacent landowners; the Forest has received numerous letters and comments concerning the activities in close proximity to private lands. The concerns generally focus on changes in scenery, noise pollution and safety.

Based on concerns expressed by the public and internal discussions, the intermix management concerns are:

Access: The need for easements across NFS lands will increase as development of intermix lands continues to increase or as properties currently without legal access change hands. Several ranger districts on the Forest are currently facing a backlog of requests for access. Many roads exist on NFS land that are in trespass.

Fire: Wildfire is a threat to life and property in the intermix, as discussed in the Fire Section of this chapter. Many people choose to live in this area because it offers a forested environment with aesthetically pleasing views, while still expecting the same level of fire protection they would receive if they were living in the city suburbs. These homeowners desire fire protection without having to provide for better access, and/or modifying the vegetation on their property, which could alter the scenic characteristics they choose to preserve.

Many residents have a fear of fire moving from public to private lands when activities such as camping with campfires and prescribed fires take place on NFS lands. The smoke from prescribed fires can cause respiratory problems to adjacent landowners as well as visibility problems on roads and highways.

Many residents living in areas that occupy natural fire regimes have unnatural fuel profiles that have changed over the years due to fire suppression and a lack of other management practices that would have mimicked nature's frequency of reducing fuel. This situation makes many areas susceptible to catastrophic fire. The increasing number of inhabitants in the intermix also creates a higher probability (risk) of human-caused fires.

Addressing this situation will require cooperation with state and county fire management officials and the development of a strategy that will involve fuel reduction on both public and private land (see the Fire Section of this chapter). It may also require the Forests to utilize special fuel treatments in intermix areas that will reduce the possibility of fire spreading either onto or off of the Forest.

Safety: Target shooting on lands near private lands and subdivisions is a concern for local residents. Stray bullets or shot pellets pose a serious safety hazard, as well as unwanted noise. Hunting is also a concern of residents, but regulating hunting does not reside with the Forest Service.

Wildlife: Increased development places more pressure on wildlife. Human presence disturbs wildlife and the presence of human developments fragments wildlife habitat, especially for big game. Pets, such as dogs and cats, can kill and harass wildlife. Conflicts with wildlife, particularly big game, will increase. In the long term, some wildlife species may be forced out of these developed areas.

Wildlife can also cause impacts, especially as developments push into big game winter range. Big game feed on ornamental shrubs, trees, gardens, and farm fields. Enhancing wildlife habitat along or near major highway corridors increases the chance of accidents involving vehicles and wildlife.

Trespass: Trespass is a major concern for intermix residents. Hunters trespassing or shooting across private property, whether by accident or intentionally, are a concern. Hikers trespassing to access NFS land are a nuisance to many property owners, who complain of trash, noise and vandalism.

The Forest experiences trespass from illegal roads developed and used for access to private land without permit or easement. Many landowners put pressure on the Forest to legitimize this use when access is available across private land. The Forest also experiences trespass in the form of fences, homes situated through erroneous surveys, wells and other buildings that are partially and in some instances completely on NFS lands.

Aesthetics: Scenic quality is an important concern for those living in the intermix. Homes are designed to take advantage of views, many of which are on NFS lands. When people buy property they expect that the appearance will not change. Vegetation management on the Forest is often resisted by adjacent residents.

Pest Management: The spread of insect and disease pests across property boundaries is a concern to both property owners in the intermix and Forest visitors. Vegetation management practices are not consistent across property lines, thereby creating different stand conditions with different degrees of risk from infestation. Large-scale outbreaks threaten the scenic quality adjacent landowners desire. The management practices that treat or prevent the outbreaks are also generally undesired.

Recreation: The intermixed landownership often prevents adequate access for Forest visitors to the National Forests. Obtaining rights-of-way across private land can be difficult, since such access can make the landowners more vulnerable to undesired activities occurring across and adjacent to this land such as shooting, OHV use, trash, and vandalism.

Illegal Dumping: Although illegal dumping occurs in many areas throughout the Forest, it is often concentrated in the intermixed areas. The materials deposited vary from household garbage and yard waste, to hazardous materials such as chemicals and motor oil. Dumping affects aesthetics, wildfire risk and potentially the health of residents and Forest visitors.

ENVIRONMENTAL CONSEQUENCES

Some concerns are not within the scope of the *Forest Plan* and do not change by alternative. Hunting is regulated by the Colorado Division of Wildlife. Discharging a firearm on NFS lands is governed by the Code of Federal Regulations Several geographic area management descriptions (*Forest Plan*, Chapter Three) place further restrictions on shooting at some locations. Illegal dumping is a law enforcement issue; the Forest Service has policies enacted for dealing with it.

EFFECTS COMMON TO ALL ALTERNATIVES EXCEPT A

The intermix management area prescription (MA 7.1 in the *Forest Plan*, Chapter Two) was developed to address the concerns and conflicts present in the areas of intermingled ownership. Lands allocated to MA 7.1 are managed to protect natural resources, provide compatible multiple

uses, reduce potential for catastrophic wildfire, and maintain cooperative relationships between the landowners and other governments with jurisdiction.

The intermix prescription was allocated mostly on the southern half of the Forests in areas where the National Forest has areas consisting of heavy amounts of mineral survey fractions adjacent to and intermingled with private lands which have developed into subdivisions. The north and west part of the Forests have intermixed landownership patterns that are not addressed as intermix under any alternative. These landownership patterns are not as intensely developed as the southern half of the Forests but do experience many of the conflicts portrayed in the affected environment, such as access, trespass and conflict with Forest recreation activities.

There are only a few areas in the intermix where new road construction is prohibited unless provided for by laws such as the *Alaskan Nation Interest Lands Conservation Act of 1980 (ANICA)*.

EFFECTS OF THE INTERMIX ALLOCATION

The intermix revision topic proved to be a confusing one to analyze. While it seems to fit into the category of management activity—it is not physical or biological; it is not a use or an occupation of NFS lands—it is difficult to quantify or even identify effects that are within the scope of the *Forest Plan* revision. Readers should, especially in this section, refer to the management area direction for MA 7.1 and to the individual geographic area narratives in the *Forest Plan* to fully understand the topic.

Table 3.141 Intermix Allocation Acres by Alternative on the Arapaho and Roosevelt National Forests

MA	Alt A	Alt B	Alt C	Alt E	Alt H	Alt I
7.1 Intermix	0	26,562	25,766	25,766	70,684	24,045

Alternative A

Alternative A does not allocate any acres to the intermix prescription and therefore does not specifically acknowledge or address the public concerns about the intermix, or put any special emphasis on intermix issues. Alternative A allocates the areas of patented mining claims to MA 4.3 dispersed recreation, MA 3.3 backcountry recreation-motorized, MA 5.11 general forest and intermingled rangelands, and MA 3.5 forest flora and fauna. The conflicts experienced in implementation of the 1984 *Forest Plan* are described under Affected Environment and led to the development of the MA 7.1 Intermix. These conflicts will continue to increase as the pressure increases to meet the management area goals of these other prescriptions.

Alternative B

The areas of most intense conflict and development in lands consisting mainly of mineral survey fractions are allocated to the intermix prescription in Alternative B. The other lands with mineral survey fractions are allocated to MA 4.3 dispersed recreation, MA 3.5 forested fauna and flora habitats, MA 1.3 backcountry recreation, and MA 5.5 forest products and dispersed recreation.

Alternative B allocates more acres in mineral survey fraction areas to MA 5.5 forest products and MA 4.3 dispersed recreation than Alternatives C or I. This provides for a lower level of conflict with adjacent landowners over vegetation management practices than either MA 5.11 and MA 5.13 forest products prescriptions provide. These lands also consist primarily of suitable timber lands that are not available for commercial timber production. There are pockets of land that are suitable and available for timber production in the second through fifteenth decades; however the scenic quality of these areas will be managed for partial retention. This should prevent major changes in the appearance of the landscape from its current character. The desired condition of this prescription provides "a pleasing appearance for Forest visitors."

The mineral survey fractions allocated to MA 4.3 dispersed recreation, and MA 1.3 backcountry recreation will continue to have the potential for conflicts between residents and Forest users, regarding access paths adjacent to private lands, campfires and target shooting except where restricted in geographic areas. Residents can expect some degree of noise from off-road vehicle use where permitted.

Alternative C

Alternative C allocates the third largest number of acres to the intermix prescription. Less acreage is allocated to MA 7.1 in the southeasternmost portion of the Clear Creek Ranger District than Alternative B, addressing almost as many of the "hotspots" of the intermix as Alternative B.

The other lands with mineral survey fractions are allocated to MA 4.3 dispersed recreation, MA 5.5 forest products and dispersed recreation, MA 5.11 general forest and intermingled rangeland and MA 5.13 forest products.

Alternative C allocates fewer mineral survey fraction acres to MA 4.3 dispersed recreation and the MA 1.3 backcountry recreation prescriptions in the intermix areas than Alternative B. These acres will continue to have the potential for conflicts between residents and Forest users regarding access paths adjacent to private lands, campfires, and target shooting, with the potential being somewhat less than Alternative B.

This alternative allocates more mineral survey acreage to forest product related prescriptions and has more acres in the patented mining claim areas which are suitable and available for timber production in decades two through 15 than Alternative B. It also has more acres than Alternative B allocated for maximum modification of visual quality, which could noticeably alter the scenic appearance desired by intermix residents. This harvest level will provide for an active fuel reduction program with longterm benefits to residents. Adjacent landowners will be affected by

the heavy vegetation treatment, which changes the appearance of their view, creates noise and dust from logging trucks, and increases fine fuels created by the slash from timber harvest. These effects are short term.

Alternative E

Alternative E allocates the same acreage to the intermix that Alternative C allocates, which is slightly less than Alternative B. This alternative also targets most of the "hotspots" in the intermix. The other lands with mineral survey fractions are predominantly allocated to MA 4.3 dispersed recreation, and MA 3.3 backcountry-motorized. These allocations will maintain the visual quality of these areas but will allow for the highest level of conflict between residents and Forest visitors, more than Alternatives C, I, or B. The sound generated from off-road vehicle use may also be undesirable to adjacent residences. This emphasis of Alternative E provides for the least amount of fuel reduction and landownership consolidation.

Alternative H

Alternative H allocates the most acres to the intermix prescription by assigning the majority of the mineral survey fraction acres to management area prescription 7.1. This alternative provides the most opportunity to address the majority of the concerns related to the mineral survey fraction areas on the Forests and to landownership consolidation.

It allocates a small amount of mineral survey fraction acres to MA 1.3 backcountry recreation, MA 3.3 backcountry recreation-motorized, and MA 4.3 dispersed recreation. These allocations will allow the potential for the same conflicts listed in other alternatives but to a lesser degree than Alternatives C, E, or I, and to a similar degree as Alternative B. Alternative H does not allocate any areas in the intermix to any forest product related prescriptions and therefore has fewer conflicts than all other alternatives related to timber harvest.

Alternative I

Alternative I allocates the most mineral survey fraction acres to MA 5.13 forest products and to MA 5.11 general forest and intermingled rangeland. The amount of this acreage that is suited and scheduled for timber production in decades two through 15 is similar to Alternative C. The potential impacts are similar to Alternative C. Alternative I also allocates some mineral survey fraction acreage to both MA 3.5 flora and fauna habitat and MA 4.3 dispersed recreation in the intermix areas. These areas have the potential for the same conflicts listed in Alternatives B, C, and E, but to a lesser degree.